LEADER

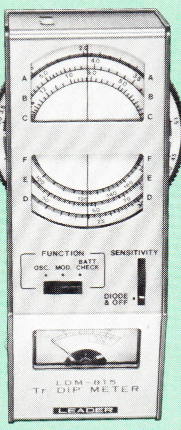
AMATEUR RADIO TEST INSTRUMENTS

LEADER ELECTRONICS CORP.

LEADER TEST INSTRUMENTS

Tr DIP METER

LDM-815



HK$680/-

1.5MHz～250MHz

One of the most useful instruments you can own for Ham, CB or other communications use. Fully self-contained, the LDM-815 is a battery operated, portable dip meter which, when docked with our LIM-870A, facilitates perfect impedance matching of communications antennas. It has many uses including checking receivers, transmitters, antenna and other circuitry. In its own right, it will determine IC network frequency resonance and is helpful in adjusting wave traps, finding parasitic oscillations and aligning receivers.

FEATURES:

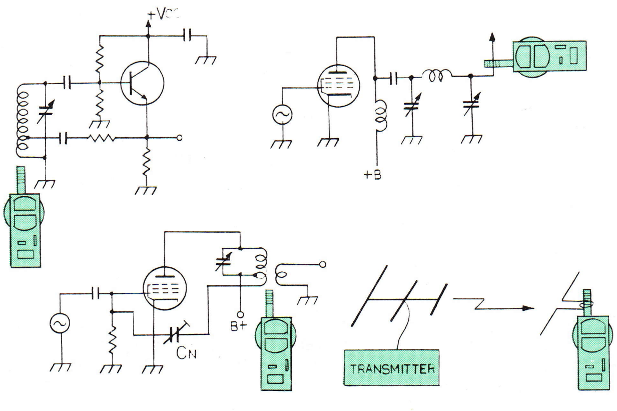
- Docks with LIM-870A to facilitate perfect impedance matching for antenna.
- 1.5 to 250MHz frequency range on fundamentals.
- Useful as a high sensitivity Absorption Frequency Meter.
- Complete with earphone and 6 plug in coils.

SPECIFICATIONS

Frequency Range	1.5 to 250MHz with 6 coils: BAND A 1.5 – 4 B 3.3 – 8 C 6.8 – 18 D 18 – 47 E 45 – 140 F 100 – 250
Modulation	Approx. 2kHz, sine wave
Crystal Oscillator	Uses 1-15MHz crystal (not supplied).
Semiconductor Complement	2 transistors and 1 diode.
Power Supply	9-volt battery: 006P, NEDA Eveready 216, Burgess 2U6, or equivalent
Current Consumption	2mA, maximum.
Size and Weight	175(H) x 65(W) x 50(D)mm; 0.5kg. approx.

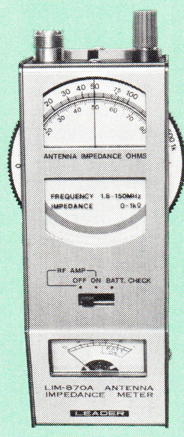
APPLICATIONS

Measurement of oscillator frequency.



ANTENNA IMPEDANCE METER

LIM-870A



1.8MHz～150MHz

The LIM-870A offers amateur and CB operators the perfect way to adjust antennas over an extended period of time to achieve optimum matching. The instrument measures feeder impedances up to 1000Ω. Measurements on the roof, or, at the antenna itself, may be accomplished merely by combining or docking the LIM-870A with the LDM-815 Dip Meter. The built-in RF amplifier design of the LIM-870A accommodates low sensitivity RF dip meters for such impedance measurements. Frequency range is 1.8 to 150MHz; and the unit utilizes 9V batteries or equivalent.

FEATURES:

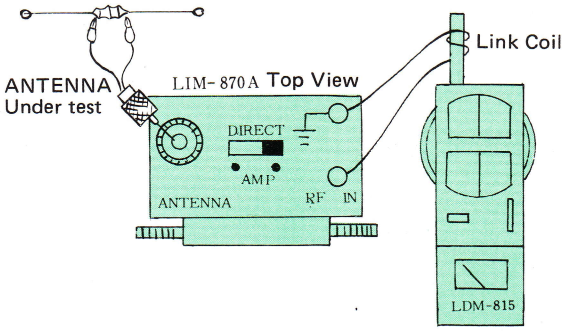
- Facilitates on site or at antenna adjustments for perfect impedance matching.
- Measures linear amplifier and receiver input impedances.
- Offers high sensitivity, balanced operation.
- Reads receiver input, cable and filter measurements.

SPECIFICATIONS

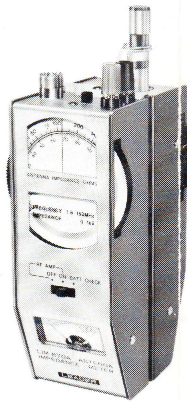
Frequency Range	1.8 – 150MHz.
Impedance Range	0 – 1kΩ; direct reading.
Functions	RF AMP at ON (maximum sensitivity) and OFF. Battery Check.
Size and Weight	175(H) x 65(W) x 60(D)mm; 0.6kg. approx.
Accessory, supplied	50Ω resistor for calibration.

APPLICATIONS;

Measuring antenna impedance and resonant frequency.
Connect as indicated in the diagram.



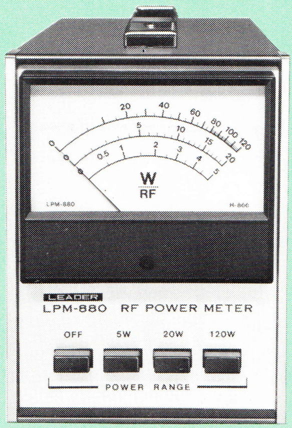
Docking LIM-870A with the LDM-815



Uses other than for antenna measurement.
A. Measuring the input impedance of linear amplifiers.
B. Measuring the input impedance of receivers.

RF POWER METER

LPM-880



0.5W～120W

Here is a direct reading, termination type meter which measures RF output in the 0.5 to 120W range from 1.8 to 500MHz. It offers push-button range selection and provides rapid measurements through use of a dummy load that has minimal direct radiation. Emission of unwanted signals is completely eliminated through proper matching of the dummy load to the broad band of frequencies covered. The LPM-880 also measures power losses in low pass filters and coaxial cables. Power range is within ±10% of full scale and load impedance is 50Ω.

FEATURES:

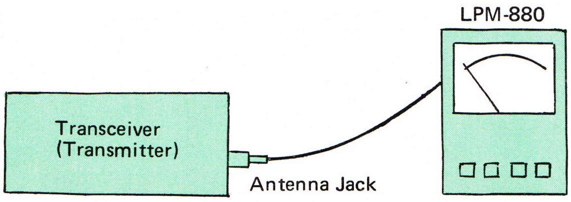
- Minimizes TVI and BCI in transmitter output.
- Broadband frequency range from 1.8 to 500MHz and power range from 0.5 to 120W.
- Direct reading easy measurement eliminates necessity for frequency correction.
- Low SWR in the measuring range.

SPECIFICATIONS

Frequency Range	1.8 – 500MHz.
Load Impedance	50Ω.
Power Range	5, 20, and 120W, full scale.
Accuracy	Within ±10% of full scale.
Input Connector	Type M (UHF)
Size and Weight	150(H) x 112(W) x 230(D)mm; 1.8kg. approx.
Accessory	Cable, 5D2V, with Type M plug.

APPLICATIONS

1. Measuring Transmitter output.....
   Connect as shown in the diagram and depress the push switch for the desired range.



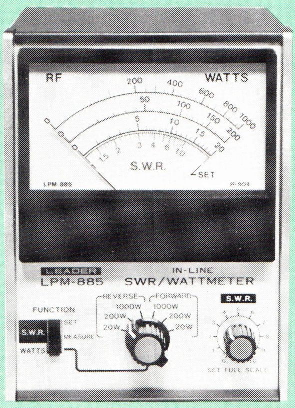
2. Checking TVI, BCI, Stereo I etc.
   Place LPM-880 and TV set side by side and set transmitter of full output. There should be no fear of TV interference if interference does not exist. Check for BCI and stereo I in the same manner.

3. Measuring power loss
   A. Measuring coaxial cables.
   B. Measuring Low-pass Filters balun, and coaxial switches.

4. Used as a Dummy Load

SWR/WATTMETER

LPM-885



1W～1000W

This in-line SWR Wattmeter makes it easy to adjust transmitters and antenna systems for maximum efficiency. A feed-through type instrument, which is designed to meassure SWR during transmission as well as power output in the 1.8 to 54 MHz frequency range. It may be left in circuit for continuous power output monitoring from 1 to 1000W. And, it has an SWR power detector circuit which may be separated for remote measurements. A wide meter scale facilitates all Power and SWR readings. The unit incorporates a forward-to-reverse power ratio to assure accurate measurements.

FEATURES:

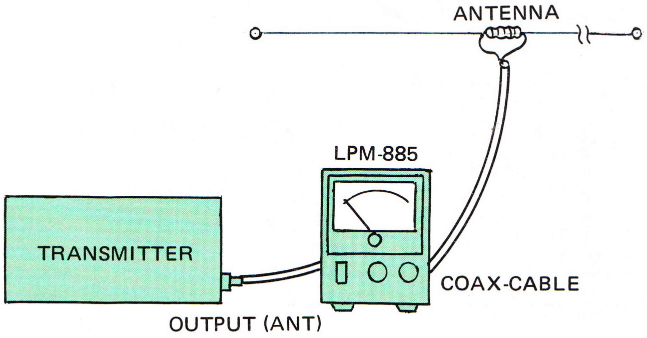
- SWR and power output readings—1.8 to 54MHz frequency band.
- Requires only 10W for SWR measurements.
- 1 to 1000W power output measurements.
- SWR/power detector circuit detachable for remote measurements.
- Feed-through power metering eliminates any power loss.

SPECIFICATIONS

Frequency Range	1.8 – 54MHz.
Impedance	50Ω.
Forward and Reverse Power	Three ranges each: 20, 200, 1000W full scale accuracy: ±10% f.s. to 40MHz, and ±15% f.s. to 54MHz.
SWR indication	1.0–10, direct reading.
SWR Power Requirement	Less than 10W.
Connectors	Type M (UHF) (Input-output)
Size and Weight	150(H) x 112(W) x 125(D)mm; 1.2kg. approx.

APPLICATIONS

1. Direct Power/SWR measurement.
   When the power switch is set at the Forward or Reverse ranges, the reflected or forward power will be indicated.
   Also the SWR will be read at the SWR MEASURE range.

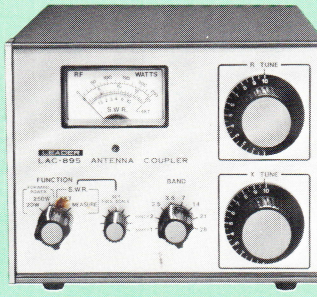


2. Detaching the detector unit.
   The detector unit can be taken out of the case and remotely located from the operating position. This will be convenient in monitoring the output.

LEADER TEST INSTRUMENTS

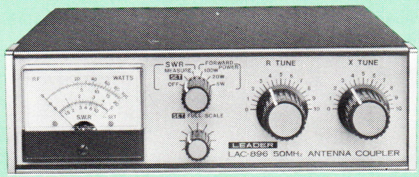
ANTENNA COUPLER

LAC-895



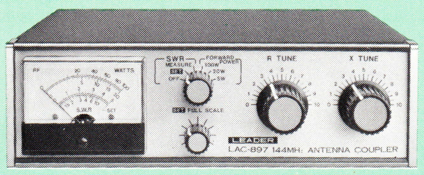
3.5MHz～28MHz

LAC-896



50MHz

LAC-897



144MHz

The LAC-895 helps to provide clearer signal reception and better transmission at maximum power output. Frequency range in the amateur band is 3.5, 7, 14, 21 and 28 MHz. (Can also be used at 27 MHz.)

FEATURES: LAC-895

- Built-in SWR and in-line Wattmeter for accurate measurements in 5 bands from 3.5 to 28 MHz.
- SWR measuring circuit facilitates matching adjustments.
- Incorporates 2 switchable direct output circuits.

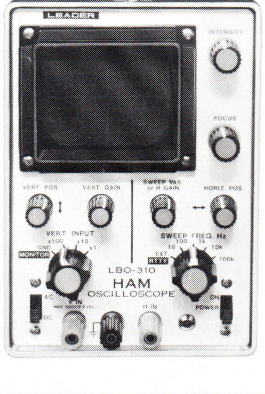
The Antenna Coupler Model LAC-896, LAC-897 are designed to connect between the transmitter (transceiver) and antenna system of the amateur radio station to provide the optimum matched condition between them.

FEATURES: LAC-896, LAC-897

- Perfect matching between the transmitter (transceiver) and antenna system can be accomplished and SWR can be adjusted to 1.0.
- Perfect matching with the antenna system helps the transmitter obtain the maximum transmission efficiency.
- The use of an accurate in-line wattmeter permits direct reading of a transmitting output
- A built in accurate SWR meter makes it e to adjust matching. The supression of spurious signals in the transmitter helps to eliminate BCI, TVI and other troubles.
- Reception sensitivity is enhanced, and then S/N ratio is improved.

SPECIFICATIONS	LAC-895	LAC-896	LAC-897
Frequency Ranges	3.5 ~ 28 MHz amateur bands	50 MHz (50 ~ 54 MHz) amateur band	144 MHz (144~148 MHz) amateur band
Input Impedance	50Ω	50Ω	50Ω
Load Impedance	50Ω or 75Ω coaxial cable, SWR<5, single wire antenna 10 ~ 250Ω	10 ~ 250Ω	10 ~ 250Ω
Power Rating			
Continuous	100W	100W	100W
50% duty (CW keying)	200W		
SSB, voice	500W pep transmitter input		
In-line Wattmeter	20W and 250W two range	5W, 20W and 100W, three ranges in forward direction	5W, 20W and 100W, three ranges in forward direction
Wattmeter Accuracy	±10% F.S.	±10% F.S.	±10% F.S.
SWR Meter	1.0 ~ 10 (direct reading)	1.0 ~ 10 (direct reading)	1.0 ~ 10 (direct reading)
SWR Power Requirement	10W	about 1.2W	about 1W
Insertion Loss	less than 0.5dB (at tuned condition)	less than 0.5dB (at tuned condition)	less than 0.5dB (at tuned condition)
Size and Weight	150(H) x 200(W) x 200(D) mm; 3kg	60(H) x 200(W) x 150(D) mm; 1.2kg	60(H) x 200(W) x 150(D) mm; 1.2kg

LBO-310HAM 3″ OSCILLOSCOPE



20mV/4MHz

Monitor single sideband and AM signals . . . observe I.F. circuit waveforms, quickly and easily with this sensitive 3″ oscilloscope . . . specifically designed for the communicator.

FEATURES:

- Continuous monitoring of RF output to 500W.
- Display of single sideband signals through the use of internal two tone oscillator circuitry.
- Modulation envelope for AM.
- Indicates tuned condition for RTTY operation.
- Checks IF circuit waveforms.

SPECIFICATIONS

Vertical Amplifier
  Sensitivity 20mVp-p/div or better.
  Bandwidth DC or 2Hz to 4MHz (−3dB)
Horizontal Amplifier
  Sensitivity 300mVp-p/div or better.
  Bandwidth DC to 250kHz (−3dB)
Time Base
  Sweep Frequency 10Hz—100kHz in four ranges.
  Synchronization Internal; negative polarity only.
Transmitter Monitoring
  Frequency range 1.8 — 54MHz.
  Impedance 50 to 75Ω.
  Measurable Output Power 2-500W
  Connectors, input/output Type M (UHF).
Two-tone oscillator
  Frequencies 1300 and 1900Hz (approx.).
  Output voltage 50mVrms, max.
Power supply 115/230V; 50/60Hz; 12VA approx.
Size and Weight 180(H) x 125(W) x 300(D)mm 4.7kg.

LA-31 SCOPE ADAPTER FOR OUTPUT MONITORING

This unique accessory is designed for use with Leader's LBO-310A or any other scope with direct deflection plate connections. You can monitor waveforms and output power of single sideband and AM transmissions by using the LA-31.

- Frequency Range 1.8 — 54 MHz.
- Impedance 50 — 75 ohms.
- Measurable Output Power 5 to 500 watts.
- Size and Weight 40(H)x50(W)x90(D)mm 110 g.

AGENT

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